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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/783,633	02/14/2001	Steven R. Bailey	6006-009	2694

29335 7590 04/12/2007
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EXAMINER	
MILLER, CHERYL L	
ART UNIT	PAPER NUMBER
3738	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
2 MONTHS	04/12/2007	PAPER

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/783,633
Filing Date: February 14, 2001
Appellant(s): BAILEY ET AL.

Paul J. Lee (Registration No.52,420)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed January 5, 2007 appealing from the Office action mailed May 18, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 48-49 and 51-66 are rejected under 35 U.S.C. 102(b) as being anticipated by Burmeister et al. (EP 0 759 730 B1). Referring to the independent claim 48, Burmeister discloses a device (stent 10 or other stents shown in figures 1, 5a, 6, 9-12) having a plurality of structural elements (stent struts or strands 12, 14, 52, 54, 62, 64, etc) capable of expanding (see fig.10a to 10b; col.3, lines 28-30) comprising first (12, 52, 62; half of the struts/strands making up the stent device) and second (14, 54, 64; other half of struts/strands making up the stent device) structural elements where at least some of the plurality of first structural elements (either some of the first set of strut/strands 12, 52, 62; OR a first layer 32 of all strands seen in fig.3 however disclosed to be applied to all stent confirmations col.6, lines 20-26 such as the stent shown in fig.1 for example) further comprise at least one first sensor element (struts/strands themselves act as sensors, therefore may be considered to comprise a sensor element, which is a portion of the strut/strand 12, 52, 62; OR the portion may be considered portion of first layer 32 of all struts or even only some of the struts) and where at least some of the plurality of second structural elements (14, 54, 64) further comprise at least one second sensor element (struts/strands themselves act as sensors, therefore may be considered to comprise a sensor element, which is a portion of the strut/strand 14, 54, 64; OR second sensor may be considered portion of second layer 34 of all or some struts/strands) both sensors which selectively detect and energy stimulus (sensors-portions of strands that sense- are capable of detecting an energy stimulus, such as temperature change of the body, or pressure from a balloon; col.7, lines 35-55)

and respond to the detection of the energy stimulus by altering the geometry or conformational profile of the device body member (expands upon stimulus; col.7, lines 35-55; figs.10a, 10b).

Referring to dependent claims 49 and 51-66, Burmeister discloses sensors that are capable of responding to energy stimuli, such as changes in temperature or pressure (disclosed examples are body temperature and balloon catheter, however other stimuli claimed such as microwave, ultrasound, laser etc would produce a change in *temperature*, therefore create the same effect-expansion). Since such claimed stimuli (microwave, laser, etc) create a change in *temperature*, inherently Burmeister's device is capable of responding to such stimuli, since Burmeister has disclosed a device that is responsive to temperature changes (col.6, lines 27-46). It is again noted that such energy stimuli is not part of the device, nor is it positively claimed as part of the device. It is functional language and all that is required by the claim is a device that is ***capable of responding in the manner claimed*** (shape conformation change) ***if*** such stimuli were applied, which Burmeister's device is. Burmeister discloses the sensor elements to be integral on the structural members (struts/strands) and to be shape memory or superelastic, wherein the two different sensors have different transitional temperatures (col.6, lines 1-50) or wherein one sensor is temperature respondent and the other sensor is pressure respondent (col.3, lines 50-60; col.4, lines 1-18). Burmeister discloses the stent to be made of laminate layers (col.6, lines 33-36 discloses a plurality of alternating layers thus making up laminates; one laminate considered to be 32 and another laminate layer considered to be 34; fig.3).

(10) Response to Argument

The applicant has argued that Burmeister fails to disclose a sensor element that is a distinct element from the structural elements. The examiner disagrees and believes that

Burmeister's invention meets the claim. First, applicant has ***not claimed*** that the sensor element need be a distinct element different from the structural elements. Distinct elements are not required by the claims. Further, applicant's elected embodiment, shown in figures 5-7B does not show the sensor to be distinct structures from the structural elements, therefore, not even the applicant has support for such distinct structures. Applicant's stent device seen in figures 5-7B is a stent having structural members (struts of the stent), wherein an area of the stent has sensing capabilities do to the material composition thus has been termed a "sensing element". Burmeister's stent having struts (structural elements) that are responsive (thus inherently acting as a sensor) is configured exactly the same as the applicants, thus has "sensor elements" just as much as the applicant's device does.

The applicant further argues that Burmeister does not disclose sensors that don't occupy the entire stent, and only occupy a portion of the stent. The examiner disagrees with that the applicant has not claimed that the sensors are limited to only a portion of the stent. Further, the first sensor of Burmeister (either some of the strands 12 ***or*** a layer 32 of all strands or some of the strands; is only a portion of the stent, because it does not include strands 14 or layer 34).

The applicant argues that Burmeister does not disclose laminates. The examiner disagrees. Figure 3 clearly showed a layered structure (laminate), further disclosing that such layered laminate shown in figure 3 may be applied to any stent configuration, such as those shown in figures 1, 5, 10, etc, see col.6, lines 20-26, thus all structural elements such as 12 and 14 of figure 1 would have such a layered structure; and may further have additional layers than those shown in figure 3, col.6, lines 32-36.

The applicant has further argued that Burmeister's stent may not qualify as a sensor since the word "sensor" does not appear in Burmeister's specification. The examiner disagrees. Burmeister clearly discloses a stent with elements (struts/strands 12, 14 for example) that are responsive to changes in temperature and pressure, thus act as a sensor and may be considered a sensor since the elements (or portions of the elements) perform the function of ***sensing*** stimuli. Burmeister's stent is exactly configured the same as applicants stent seen in elected figures 5-7B, having struts/strands (structural elements) that are shape memory or superelastic materials and respond to changes in temperature or pressure. Because applicant is terming the structural member having such a response a "sensor", Burmeister's may also be considered a "sensor" since it is the same as applicants. Applicant's "sensor" is simply a shape memory or superelastic material. Burmeister discloses such materials thus inherently by evidence of applicants specification, have a "sensor", since shape memory and superelastic materials are sensors. Further, applicant has cited a definition of sensor to be "a device that responds to a physical stimulus and transmits a resulting response". Burmeister's stent clearly responds to a physical stimulus (heat, when placing the device from an outside environment to inside a persons body, or when a person has a fever, increase in temperature, or application of pressure, such as a balloon catheter, all are physical stimulus disclosed by Burmeister) and transmits a resulting response (Burmeister's response is a change in conformation of the stent, expansion).

The applicant has further argued that Burmeister does not enable the claimed invention. The examiner disagrees for all the above reasons.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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